

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/023793

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D251/46 C07D401/14 C07D403/04 C07D251/42 C07D401/04  
C07D239/46 C07D413/04 C07D251/16 C07D251/52 C07D251/50  
C07D251/54 C07D239/48 C07D401/12 A61K31/53 A61K31/506

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BEILSTEIN Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, A	WO 03/101980 A (VAN SCHARRENBURG GUUSTAAF J M ; REINDERS JAN H (NL); SOLVAY PHARM BV ( ) 11 December 2003 (2003-12-11) page 14 - page 16; examples	1-180
A	WO 03/024926 A (ALEXANDER CHRISTOPHER W ; REDDY US THERAPEUTICS INC (US); SAXENA UDAY) 27 March 2003 (2003-03-27) examples; table 2	1-180
A	WO 99/50256 A (KOYMAN'S LUCIEN MARIA HENRICUS ; HEERES JAN (BE); DAEYAERT FREDERIK FRA) 7 October 1999 (1999-10-07) examples 85-87; table 3	1-180
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

22 November 2004

Date of mailing of the international search report

08/12/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>MATHIAS J P ET AL: "SELF-ASSEMBLY THROUGH HYDROGEN BONDING: PERIPHERAL CROWDING- A NEW STRATEGY FOR THE PREPARATION OF STABLE SUPRAMOLECULAR AGGREGATES BASED ON PARALLEL, CONNECTED CA3.M3 ROSETTES" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, DC, US, vol. 116, 1994, pages 4326-4340, XP000942081 ISSN: 0002-7863 page 4330; examples 23,24 -----</p>	1-180

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 60-72 and 77-101 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☒ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

## Continuation of Box II.1

Although claims 60-72 and 77-101 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.

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## Continuation of Box II.2

Present claims 1, 28, 43 relate to an extremely large number of possible compounds. Support within the meaning of Article 6 PCT and/or disclosure within the meaning of Article 5 PCT is to be found, however, for only a very small proportion of the compounds claimed. In the present case, the claims so lack support, and the application so lacks disclosure, that a meaningful search over the whole of the claimed scope is impossible. Consequently, the search has been carried out for those parts of the claims which appear to be supported and disclosed, namely the examples of the description, wherein A and B are -CH, R2a and R4 are a hydrogen atoms and R2 is a substituted carbon atom.

Moreover it is not clear why there can be present up to 2 R1 substituents when F, E and D are independently CH or N. From these definitions it appears that R1 should be positioned between R1a and F and can thus be present once or absent. Nevertheless the ring containing F, E and D has been searched as being optionally substituted and optionally condensed with further rings.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/023793

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 03101980	A	11-12-2003	BR 0304925 A WO 03101980 A1 US 2004038972 A1	28-09-2004 11-12-2003 26-02-2004
WO 03024926	A	27-03-2003	CA 2461074 A1 EP 1436266 A2 WO 03024926 A2 US 2004077648 A1 US 2004224950 A1	27-03-2003 14-07-2004 27-03-2003 22-04-2004 11-11-2004
WO 9950256	A	07-10-1999	AU 758624 B2 AU 3599799 A BG 104716 A BR 9909197 A CA 2324921 A1 CN 1295566 T EA 4540 B1 EE 200000535 A WO 9950256 A1 EP 1066269 A1 HR 20000621 A1 HU 0101372 A2 ID 26043 A JP 2002511390 T NO 20004809 A NZ 506787 A OA 11493 A PL 343195 A1 SK 14052000 A3 TR 200002761 T2 TW 570917 B US 2002115668 A1 US 6150360 A US 6372729 B1 EP 0945447 A1 ZA 200006042 A	27-03-2003 18-10-1999 30-04-2001 05-12-2000 07-10-1999 16-05-2001 24-06-2004 15-04-2002 07-10-1999 10-01-2001 30-04-2001 28-10-2001 16-11-2000 16-04-2002 24-11-2000 28-02-2003 07-05-2004 30-07-2001 11-06-2001 22-01-2001 11-01-2004 22-08-2002 21-11-2000 16-04-2002 29-09-1999 26-10-2001